

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended) An interventional device for introduction through a vascular penetration to a treatment site in a vessel comprising:

a catheter shaft having a proximal extremity, a distal extremity and an interventional element coupled to the distal extremity; and

a guidewire tube having a proximal end, a distal end and a guidewire lumen therebetween configured to slidably receive a guidewire, the distal end being coupled to the distal extremity of the catheter shaft and the proximal end being separate from the catheter shaft; and

a collar having a distal portion with a distal end positionable in the vascular penetration and a proximal portion adapted to remain outside the vascular penetration, the collar having a first longitudinal passageway configured to slidably receive the proximal extremity of the catheter shaft without substantial leakage of blood therethrough, and a second longitudinal passageway configured to slidably receive the proximal end of the guidewire tube without substantial leakage of blood therethrough, wherein the first passageway is discrete from the second passageway from the distal end through at least part of the proximal portion, and

wherein the proximal extremity of the catheter shaft and the guidewire tube each have a length sufficient to extend to the vascular penetration when the interventional device is positioned at the treatment site.

2. (cancelled)

3. (currently amended) The interventional device of claim 2 claim 1 wherein the collar is positionable through a hemostatic device in the vascular penetration, the collar having an exterior surface configured to seal within the hemostatic device.

4. (withdrawn) The interventional device of claim 2 wherein the collar comprises a seal in communication with the at least one passage for inhibiting leakage of blood around the proximal extremity.

5. (cancelled)

6. (original) The interventional device of claim 1 wherein the guidewire tube comprises a slit disposed longitudinally therein from a distal point less than about 50 cm from the distal end to a proximal point at least about one-half the length of the guidewire tube from the distal end.

7. (original) The interventional device of claim 6 wherein the proximal point is within about 20 cm from the proximal end.

8. (original) The interventional device of claim 6 wherein the proximal point is at the proximal end.

9. (original) The interventional device of claim 6 further comprising a wire guide positionable through the slit and operative upon the guidewire such that the guidewire is disposed in the guidewire lumen distal to the wire guide and disposed outside the guidewire lumen proximal to the wire guide.

10. (original) The interventional device of claim 9 further comprising a collar having at least one passage configured to slidably receive the proximal extremity of the catheter shaft and the guidewire tube.

11. (original) The interventional device of claim 9 wherein the wire guide is coupled to the collar.

12. (original) The interventional device of claim 10 wherein the collar comprises a first passage for receiving the catheter shaft and a second passage for receiving the guidewire tube.

13. (original) The interventional device of claim 9 wherein the wire guide comprises a distal opening, a proximal opening, and a guide passage therebetween, the distal opening being aligned with the guidewire lumen and the proximal opening being outside the guidewire tube when the wire guide is positioned through the slit.

14. (original) The interventional device of claim 9 wherein the wire guide comprises a rounded or tapered distal edge configured to spread the slit in the guidewire tube.

15. (original) The interventional device of claim 1 wherein the guidewire tube has a length of at least about 100 cm.

16. (withdrawn) The interventional device of claim 1 wherein the guidewire tube is collapsible from an extended length to a collapsed length.

17. (withdrawn) The interventional device of claim 16 wherein the guidewire tube has an accordion-like wall.

18. (withdrawn) The interventional device of claim 16 wherein the guidewire tube comprises a series of generally conical segments connected by hinges, adjacent conical segments being pivotable toward and away from each other about the hinges.

19. (withdrawn) The interventional device of claim 16 wherein the guidewire tube has a wall with a zig-zag cross-section.

20. (withdrawn) The interventional device of claim 16 further comprising a collar having at least one passage configured to slidably receive the proximal extremity of the catheter shaft.

21. (withdrawn) The interventional device of claim 20 wherein the proximal end of the guidewire tube is coupled to the collar such that moving the catheter shaft relative to the collar extends or retracts the guidewire tube.

22. (withdrawn) The interventional device of claim 16 wherein the collapsed length is less than about 50% of the extended length.

23. (original) The interventional device of claim 1 wherein the interventional element comprises a stent.

24. (original) The interventional device of claim 23 wherein the interventional element comprises a plurality of stent segments.

25. (original) The interventional device of claims 24 further comprising a sheath slidably disposed over the stent segments.

26. (original) The interventional device of claim 25 wherein the sheath may be selectively positioned to deploy a first selected number of stent segments from the catheter shaft while retaining a second selected number of stent segments on the catheter shaft.

27. (original) The interventional device of claim 1 wherein the interventional element comprises a balloon.

28. (original) The interventional device of claim 27 further comprising a sheath slidably disposed over the balloon.

29. (original) The interventional device of claim 28 wherein the sheath may be selectively positioned to expand a first portion of the balloon while constraining a second portion of the balloon.

30. (original) The interventional device of claim 1 wherein the guidewire tube couples with the catheter shaft proximal to the interventional element and extends to a point distal to the interventional element.

31 - 49 (cancelled)

50. (new) The interventional device of claim 24, further comprising a pusher member slidably disposed over the catheter shaft, the pusher adapted to prevent proximal movement of the plurality of stent segments.

51. (new) The interventional device of claim 25, wherein the sheath comprises an annular ridge disposed near a distal end of the sheath and adapted to engage at least one of the plurality of stent segments.

52. (new) The interventional device of claim 1, further comprising a therapeutic agent disposed on the interventional element.

53. (new) The interventional device of claim 1, further comprising a biodegradable polymeric coating disposed on the interventional element.

54. (new) The interventional device of claim 52, wherein the therapeutic agent reduces restenosis.

55. (new) An interventional device for introduction through a vascular penetration to a treatment site in a vessel comprising:

a catheter shaft having a proximal extremity, a distal extremity and an interventional element coupled to the distal extremity, the interventional element having a selectable length adapted to be deployed at the treatment site while a remaining length of the interventional element remains undeployed and coupled to the distal extremity of the catheter shaft; and

a guidewire tube having a proximal end, a distal end and a guidewire lumen therebetween configured to slidably receive a guidewire, the distal end being coupled to the distal extremity of the catheter shaft and the proximal end being separate from the catheter shaft;

wherein the proximal extremity of the catheter shaft and the guidewire tube each have a length sufficient to extend to the vascular penetration when the interventional device is positioned at the treatment site.